Date: Sun, 15 Aug 93 04:30:18 PDT

From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>

Errors-To: Ham-Space-Errors@UCSD.Edu

Reply-To: Ham-Space@UCSD.Edu

Precedence: Bulk

Subject: Ham-Space Digest V93 #8

To: Ham-Space

Ham-Space Digest Sun, 15 Aug 93 Volume 93 : Issue

Today's Topics:

Help needed on legal questions (2 msgs) SPACE TRIVIA LIST UPDATE - 14th August, 1992

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

\_\_\_\_\_\_

Date: Sat, 14 Aug 1993 11:17:02 GMT

From: math.fu-berlin.de!news.dfn.de!scsing.switch.ch!aristo.tau.ac.il!

zvikal@uunet.uu.net

Subject: Help needed on legal questions

To: ham-space@ucsd.edu

A question that is intriguing me:

In the U.S., does one need a license in order to operate a radio station that only listens to broadcasts? Is a license necessary in order to build such equipment or buy it?

Consider the story from a few years back of th USSR embassy buying a piece of land very close to the sattelite receiving station that the NSA operates where the Keyhole reconnisance sattelites' imagery is received and processed. A further extension of this idea (with possibly more complex legal sides to it): If one puts a small sat dish near a legally operated SPOT reception station, and thus gets all the pictures this station has paid for, is that legal? Taken to the extreme, If I put a dish in my yard that receives A cable TV broadcast, is that also illegal?

If you want to reply directly to me, my email is

zvikal@ccsg.tau.ac.il

Thanks, Zvi Lev

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Date: 14 Aug 1993 15:20:48 -0400

From: pravda.sdsc.edu!news.cerf.net!usc!howland.reston.ans.net!

newsserver.jvnc.net!yale.edu!think.com!rpi!eddie.mit.edu!news.intercon.com!panix!

not-for-mail@network.ucsd.edu

Subject: Help needed on legal questions

To: ham-space@ucsd.edu

In <1993Aug14.111702.14026@aristo.tau.ac.il> zvikal@ccsg.tau.ac.il (Zvi Lev)
writes:

>In the U.S., does one need a license in order to operate a radio >station that only listens to broadcasts?

Generally, no. But some categories of listening are forbidden -listening to cellular phone calls, using a radar detector in a state where it is illegal, listening to police calls on a scanner in a car in states where that is forbidden ... or unscrambling a video satellite signal that was encrypted ...

>Is a license necessary in
>order to build such equipment or buy it?

>Consider the story from a few years back of th USSR embassy buying
> a piece of land very close to the sattelite receiving station that
>the NSA operates where the Keyhole reconnisance sattelites' imagery is
>received and processed. A further extension of this idea (with
>possibly more complex legal sides to it): If one puts a small sat
>dish near a legally operated SPOT reception station, and thus gets
>all the pictures this station has paid for, is that legal?

If it is encrypted and you decrypt it, no it might not be legal. If it is not encrypted you could receive it but could not copy it or otherwise distribute it.

>Taken to the extreme, If I put a dish in my yard that receives A cable >TV broadcast, is that also illegal?

NONE OF THIS IS LEGAL ADVICE. SEE A LAWYER FOR ADVICE SPECIFIC TO YOUR SITUATION IF YOU ACTUALLY CARE ABOUT THIS.

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Carl Oppedahl AA2KW (patent lawyer) 1992 Commerce Street #309 Yorktown Heights, NY 10598-4412 voice 212-777-1330

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Date: Sat, 14 Aug 1993 19:21:10 GMT

From: munnari.oz.au!metro!seagoon.newcastle.edu.au!scorch!lukpla@uunet.uu.net

Subject: SPACE TRIVIA LIST UPDATE - 14th August, 1992

To: ham-space@ucsd.edu

IF YOU POSSIBLY CAN, PLEASE CONTRIBUTE TO THIS LIST. THIS LIST DEPENDS UPON THE KIND DONATIONS OF ITEMS FROM PEOPLE ON THE NET.

This list is now available via anonymous ftp from the following sites:

krakatoa.jsc.nasa.gov as /misc-docs/trivia.txt
ames.arc.nasa.gov as /pub/SPACE/MISC/trivia.txt

If at ANY time you want the latest update on the trivia list, then it will be at one of these sites. I will be updating the complete list to these sites each time an update appears in the newsgroups.

The news distribution of this file is now:-

sci.space
sci.space.shuttle
sci.astro

rec.radio.amateur.space

The last group will only be included when there are new items of trivia are related to amateur radio in some way.

Luke Plaizier - Space Trivia List Moderator

 (174) The current shuttle flight computers are Quad redundant with a fifth computer as a backup. They are AP-101S machines and were designed in the mid 80's. Relatives of this computer also fly on the B-1, F-8, AC-130 and B-52.

[Wingert@vnet.IBM.COM (Bret Wingert)]

(175) "every passing year brings the Solar System forty-three thousand
 miles closer to Globular Cluster M13 in Hercules-- and still there
 are some misfits who insist that there is no such thing
 as progress." RANSOM K. FERN
 [From burt@techbook.com (Burt Keeble)]
 (This was posted with a smiley, so we'd like some more info
 on this one if anyone has any...)

(176) Here's another bit of trivia for you: Neil Armstrong and David Scott were in rather of a pickle during their Gemini 8 mission when a thruster continued firing after instructed to stop, putting the spacecraft in a spin. I believe the mission was then curtailed because of the lack of adequate thruster propellant for on-orbit maneuvering and re-entry positioning. Evidently American television audiences complained at the news reports interrupting the show they were watching with news of this real-life space drama. The show? Star Trek.

[From quagga@trystero.com]

(177) The top age set for the intake of the new group of astronauts for the selection of the original Mercury Seven astronauts was set at 40. The maximum height was set at 5ft, 11in and the weight limit was 180lb.

[We Seven - by the Astronauts Themselves, Simon and Schuster, New York, 1962.]

(178) The first check of Military Test Pilot records revealed that 508 test pilots met the basic astronaut requirements. With suggestions from commanding officers, this was reduced to 110. Further, with the help of trainers and instructors, who'd brought these men up to flight status, this was further reduced to 69. These people were all invited to apply, but only 32 volunteered. These all went on to undergo physical examinations and were reduced to 14. The selection of the final 7 came at 2PM, April 9, 1959.

[We Seven - by the Astronauts Themselves, Simon and Schuster, New York, 1962.]

(179) John Glenn was the only Mercury astronaut with Red Hair, all the others had brown hair.

[We Seven - by the Astronauts Themselves, Simon and Schuster, New York, 1962.]

- (180) Alan Shepard was the tallest Mercury Astronaut at 5ft 11in, and Gus Grissom the shortest at 5ft 7in. [We Seven - by the Astronauts Themselves, Simon and Schuster, New York, 1962.]
- (181) Gordon Cooper was the Youngest Mercury astronaut at 32 years of age at selection, and John Glenn the oldest at 37. [We Seven - by the Astronauts Themselves, Simon and Schuster, New York, 1962.]
- (182) Alan Shepard was particular fond of Jos(233) Jim(233)nez, the brainchild of comedian Bill Dana. Al found Jim(233)nez brand of humour such a handy device for relaxing the troops when tension was building up before a flight that he once arranged for a tape of some of Jos(233)'s dialogue to be played in the Mercury control centre during a practice run.
  [We Seven by the Astronauts Themselves, Simon and Schuster, New York, 1962.]
- (183) Alan Shepard was so fond of his white Corvette sports car that he would often drive the 800miles from his home town to Cape Canaveral rather than fly.
  - [We Seven by the Astronauts Themselves, Simon and Schuster, New York, 1962.]
- (184) Milt Thompson is the person who came closest to flying in space without actually doing so: he is the only person ever to have flown into the mesosphere (above the stratopause at about 50 km) without making it above the 80 km limit that is becoming the accepted boundary of space by space historians.

  [Jonathon's Space Report, No. 164, August 11, 1993]
- (185) Wally Schirra came back to the US with stories of the good humour of the Australians when he returned from a tour of duty at the Mercury tracking station. Somebody had said 'Site status green, flight control is Extra Grouse' using the term Extra Grouse to replace O.K.
  - [We Seven by the Astronauts Themselves, Simon and Schuster, New York, 1962. Had to include this one for my fellow Australians....]
- (186) A small controversy erupted from the Apollo 8 and 10 flight crews who went to the moon but never actually landed. Apollo 8 reported that the Moon was gray, while Apollo 10 claimed it was Brown. [LIFTOFF - By Michael Collins.]
- (187) The area picked out for the landing of Apollo 11 was expected to be smooth but instead it was littered with boulders the size of

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Volkswagons.
[LIFTOFF - By Michael Collins.]
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- (188) The albedo of the Earth is some 4 times greater than that of the Moon. [LIFTOFF By Michael Collins.]
- (189) Mike Collins bet Neil Armstrong a beer that they would land in the Ocean a splash upside-down once they hit the water. The astronauts were required to throw a breaker that released the parachutes, but at the moment of splash down their hands are kerked away, and the craft slowly turned over. [LIFTOFF - By Michael Collins.]

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- (1) It seems that after STS-1 got in orbit, one of the astronauts was eager to try out the (older, also expensive) toilet. I think it was Crippen. Apparently all John Young heard was this "Whoosh AHHHHHH!!!!". There is a fan in it to suck down the contents. Apparently the fan was verified to be working correctly (i.e. it spun up) but nobody ever checked to see if it sucked or blew... [From HOLLIS@TITAN.KSC.NASA.GOV]
- (2) When trying to find a way to keep the water out of the parachute compartment after splashdown, scientists ended up using a product from a drug store. I saw this on a space travel special. The story

goes something like one of the project scientists sons was up with a cold. So, the scientist mixed up a cold remedy gel (added water to a powder) for his son late one night. This gave him the idea. When itemizing the inventory for the project budget, they used the drug store product code and used a backwards spelling of the product name. Of course, they adapted it a bit for the spacecraft, but the same principle of this gel was used.

[mark.blevis@qmail.dgrc.doc.ca]

- (3) Supposedly, one shuttle launch was delayed due to a rare bird nesting in the launch pad gantry. Does anyone know if this is true and if so which launch? (According to the guide on a KSC coach tour probably not the most reliable of sources 8-}) [Mark Grant <mark@isltd.insignia.com>]
- (4) The Demise of Blue Streak and ELDO put paid to plans laid in 1968 to launch leeches 'the world's most ideal space travellers' on an extended flight.

"Give them a bloody meal before they go, and they'll need nothing for a year-and-a-half!" was how one scientist characterized the suitability of leeches for space travel. Posing no feeding or waste disposal problems, leeches might even breed en-route - providing researchers with a useful insight into the genetic side-effects induced by exposure to radiation in space.

(5) In some respects, Neil Armstrong was fortunate to become the first Moonwalker. In 1963, his place in the history books was under seige from a chimpanzee named Howard!

After just one year of study at the US Space School, Howard had broken the world's land speed record in a rocket propelled sled, and had been banned from playing noughts-and-crosses with visitors because he usually won!

The chances are that if a monkey had been selected to fly to the Moon instead of a man, it would have been Howard.

(6) Under the direction of NASA's Ames Research Center in California, a study was conducted into the viability of employing a 'vacuum cleaner' type device in Low-Earth orbit to collect some of the particles of Moonrock (tectites) that are dislodged from the lunar surface by annual meteorite showers and sometimes find their way to the Earth's surface.

Collected in orbit and returned to Earth by parachute, samples gathered in this way would be free from the contamination caused by passage through the Earth's atmosphere.

(7) In reference ot item 64 in the trivia list, Is the reason given true?

1978-1986 the rumor was that if ejected at 100 Kft then you would drift up to 200 Kft before falling back. During the fall, the aero heating

would become so intense that helmet melting would be likely. I'd love to know real reason the 100Kft limit was enacted. [from rlove@raptor.rmnug.org]

(8) One of my favorite stories (though you should probably check out the veracity of it) is in regards to the Apollo program. Several of the early launches were on Little Joe II rockets, which were solid fuel boosters, and were designed mainly to test the escape tower system. The Little Joe II rocket was described by one NASA official as being "the most reliable booster we've ever built". On the last such flight, the fuel charge in the Little Joe II shattered several seconds before the scheduled test of the escape tower, creating a true emergency for the escape tower to handle (the escape tower worked perfectly). The Little Joe II launches, by the way, took place at White Sands Missle range.

[jones%azterra@sj.ate.slb.com (Clark Jones)]

- (9) Is there any truth to the rumor that Dick Nixon ordered all plans for the Saturn V destroyed so that they wouldn't fall into the hands of the Soviets? [jones%azterra@sj.ate.slb.com (Clark Jones)]
- (10) At one time, the Gemini space craft was going to land on land rather than on water, with a rather bizzare inflatible "hang-glider" instead of parachutes. (I remember having a NASA publication when I was a kid that had drawings of this configuration. It even showed the storage compartment for the inflatible wing running between the two hatches.)

[jones%azterra@sj.ate.slb.com (Clark Jones)]
(Can anyone come up with some sources for backing up/refuting the last three items?)

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(255)	

End of Ham-Space Digest V93 #8 \*\*\*\*\*\*\*\*\*\*\*\*